

THE FIELD OFFICE TECHNICAL GUIDE

DEFINITION AND PURPOSE

The Field Office Technical Guide (FOTG) in New York is an essential reference for those individuals concerned with conservation in the state. It contains specific information dealing with the wise use and development of soil, water, air, plant, and animal resources as well as human, social, and cultural concerns.

The FOTG is designed to be used by technically trained persons who are assisting landowners, land managers or responsible officials to plan, apply and maintain appropriate conservation practices. The purpose of the FOTG is to promote conservation of New York's natural resources in a consistent and responsible fashion.

The FOTG is a major reference for addressing priority resource goals including:

- Reduction of damage caused by excessive soil erosion;
- Protection of surface and ground water from non-point source pollutants
- Enhancement of farmland production through conservation application; and
- Reestablishment and enhancement of critical wildlife habitats including wetlands, grasslands, and other unique ecosystems.

Nonpoint source (NPS) pollutants have been identified as sediment, nutrients, animal wastes, pesticides and salinity. NPS pollution reduction concepts and techniques represent a relatively new and rapidly developing area of technical expertise. References, data and narratives will be updated as experience increases and the effects of improved practices are documented. Every practitioner is encouraged to submit new ideas and suggestions for improvements to the FOTG and make the effort for improving water quality practical and effective.

The FOTG is used in an NRCS county field office and is localized so that it specifically applies to that geographic area. The guide provides the following:

- Soil interpretations of resource use and potential productivity within alternative levels of management intensity and conservation treatment;
- Technical information for achieving NRCS technical standards and land users' objectives;

- Information for interdisciplinary planning for the conservation of soil, water, air, plant and animal resources;
- A basis for identifying Resource Management System (RMS) options and, when necessary for programmatic or legislated purposes, Acceptable Conservation System (ACS) and Basic Conservation System (BCS) options;
- Information on the effects of Conservation Management Systems and their component practices;
- Criteria to evaluate the quality of CMS options;
- Standards, specifications, and guidelines for conservation practices
- Information for evaluating the economic feasibility of conservation practices and CMS options;
- Information for locating and identifying cultural resources and methods to account for their significance; and
- Technical material for instructing and training employees.

LIMITATIONS OF THE NEW YORK FIELD OFFICE TECHNICAL GUIDE

The FOTG contains information for use in providing technical assistance to decisionmakers for the planning and implementation of a system of conservation practices. The goal is to achieve a level of natural resource management that provides for protection that prevents degradation and permits sustainable use. The information used in developing a CMS must reflect specific sites and activities and conform to all local, state and federal requirements. The FOTG does not provide all information needed to solve every possible problem that may occur. The final planning product is limited by the original scope of consideration. Unique or complex problems may require additional effort.

All the data and references in the FOTG are materials to help the conservation planner and decisionmaker consider a range of alternative responses to a resource problem and assess the effects of each. The conservationist will develop a good understanding of the relationships between resources, cause and effect, action and inaction and, most of all, between people and their environment.

CONTRIBUTORS TO THE FOTG

All conservation planners and related discipline specialists are encouraged to use this guide to avoid confusion for land managers and possible conflict with Federal Law. If

there is a conflict with State Law, the State Law prevails. The following units of government and groups are contributors to the development of the FOTG:

- Cornell Cooperative Extension Service
- New York State - Department of Environmental Conservation
- New York State – Department of Agriculture and Markets
- New York State - Soil and Water Conservation Committee
- New York Association of Conservation Districts
- New York Crop Management Association
- State University of New York - College of Agriculture and Life Sciences at Cornell University
- State University of New York - College of Environmental Science and Forestry at Syracuse
- U.S. Department of Agriculture - Farm Service Agency
- U.S. Department of the Interior - Fish and Wildlife Service

SECTIONS OF THE FIELD OFFICE TECHNICAL GUIDE

The FOTG contains five sections as follows:

- ***Section I – General Resource References***
 - Reference Lists
 - Cost Data
 - Maps
 - Erosion Prediction
 - Federal, State, and Local Laws, Ordinances or Regulations
- ***Section II – Natural Resources Information***
 - **Soil and Site Information**
 - Soil Interpretations
 - Soil Map Units
 - Soil Descriptions
 - Land Use Interpretations
 - **Climatic Data for Planning Resource Management Systems**

- **Cultural Resource Information**
- **Threatened and Endangered Species**
- **Forage Suitability Groups**
- **Ecological Site Descriptions**
- ***Section III – Resource Management Systems and Quality Criteria***
 - **Resource Quality Criteria for Resource Management Systems**
 - Soil
 - Water
 - Air
 - Plants
 - Animals
 - Human (Economic, Social, and Cultural)
 - Resource Management System Guidesheets
 - Practice Effects Guidesheets
 - Legislated Programs
 - Guidance Documents
 - Conservation Systems with RMS Minimums for each Land Use
- ***Section IV -Practices Standards, Specifications, and Guidelines***
 - Index of Practice Standards
 - Conservation Practice Standards
 - Conservation Practice Specifications
 - Conservation Practice / Process Guidelines
- ***Section V - Conservation Effects***
 - Effects for Conservation Management System Formulation (CPPE)
 - Effects for Decision Making
 - Procedural References

SECTION I - GENERAL RESOURCE REFERENCES

Section I lists references and other information for use in understanding natural resources of the field office service area or in making decisions about resource use and management systems. The actual references listed are to be filed, to the extent possible, in the same location as the FOTG. Computer-based tools used in resource analysis and

modeling will be listed in Section I. References kept in other locations will be cross-referenced. Examples include texts and publications dealing with databases found in Section II (below) as well as other resource issues. Subsections can be seen in §401.5, Exhibit: Information and Examples for FOTG Contents, Section I, General Resource References, of this Subpart.

Section I lists references and other information for use in understanding the field office working area or in making decisions about resource use and Conservation Management Systems (CMS). The actual references listed may be listed in the (1) FOTG (2) in other binders that are dedicated to National Handbooks, Technical References, and the General Manual or in file drawers under appropriate subject headings, or (3) may be referenced to a variety sites on the World Wide Web (www).

SECTION II – NATURAL RESOURCES INFORMATION

Section II contains natural resource data, databases, and procedures for interpretation. Included is information regarding soils, ecological site descriptions, climatic data, cultural resources, threatened and endangered species (at the State and Federal levels), and forage suitability groups for grazing livestock.

The following are subsections of Section II of the FOTG:

- A) Soils Information;
- B) Climatic Data;
- C) Cultural Resources Information;
- D) Threatened and Endangered Species Lists;
- E) Ecological Site Descriptions; and
- F) Forage Suitability Group Descriptions.

The basis for the soils information is the National Soils Information System (NASIS) found at <http://nasis.nrcs.usda.gov/>. This data contains information about the soil survey of the local area including soil descriptions and interpretations that can be used to help make decisions about the use and management of the county's natural resources. Soil characteristics that limit or affect land use, management are identified, and soils are rated according to limitations, capability or potential.

SECTION III - CONSERVATION MANAGEMENT SYSTEMS

This section provides guidance for developing Conservation Management Systems (CMS) as Resource Management Systems (RMS) or, for Food Security Act purposes, Acceptable Conservation Systems (ACS) and Basic Conservation Systems (BCS). CMS's prevent or treat natural resource problems and take advantage of opportunities associated with these resources. Section III includes a description of considerations important in conservation planning of soil, water, air, and related plant, and animal resources. The quality criteria (QC) for the treatment required achieving an RMS is established by the NRCS and is contained in this section. The QC are stated in either quantitative or qualitative terms. When implemented and maintained, an RMS achieves the goal of preventing resource degradation and permitting sustainable use.

SECTION IV - PRACTICE STANDARDS AND SPECIFICATIONS

This section is an alphabetical list of conservation practices used by the field office, followed by practice standards, specifications, and guidelines. Supplements may also be present for a selected practice. The standards also include references and documentation requirements for the individual practices. The three products in this section are defined as follows:

- *Practice Standards*
Establish the minimum level of acceptable quality for planning, designing, installing, operating and maintaining conservation practices.
- *Practice Specifications*
Describe the technical details and workmanship required to install the practice and the quality and extent of materials used in the practice.
- *Practice Guidelines*
Present detailed, step-by-step instructions on planning, design, installation, and documentation of NRCS practice standards used in New York.

In New York, the actual standards, specifications, and guidelines are housed and maintained in the National Handbook of Conservation Practices (NHCP). They are also accessible at <http://www.ny.nrcs.usda.gov/standards/index.htm> .

SECTION V - CONSERVATION EFFECTS

This section contains information used in evaluating CMS's for the five SWAPA resources and the human considerations. This evaluation is dependent on the conservation

planning disciplines: soils, agronomy, biology, forestry, engineering, etc., used with Conservation Practice Physical Effects (CPPE). These include site specific data with quantitative or narrative effects for each of the five SWAPA resources. Producer experiences of resource situations where conservation is successfully applied, instructions, and technical notes for following the Conservation Effects for Decision-making (CED) procedures is also found in this section.

Conservation effects provide indicators of the impacts conservation practices and systems have on the natural and cultural resources. They are based primarily on empirical data and field experience with practices and systems of practices. The effects are listed for each individual practice. The effects of systems can be estimated by evaluating the combined effects of practices included in a specific system. When properly planned and applied, systems of conservation practices are generally complimentary and accumulative. Rarely are conservation practice effects opposing or damaging to the natural resources base.